ARIN Technologies Inc.

Location Awareness for the Internet of Things

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Big organizations have hugely inefficient processes due to lack of knowledge

- Workers need to find tools, equipment and product in large facilities
  - 30% of Aerospace manufacturing worker time is spent searching!
  - 10% overage in number of tools and equipment available in a plant
- Managers need to know utilization of high value movable assets
  - Some assets are estimated to have only 50% utilization e.g forklifts
- Process improvement managers need to know how work actually gets done
- Safety managers need to implement processes and technologies for a safe environment while ensuring productivity
  - Each accident involving a worker can cost industry on average $40,000
- P&L Owners need to ensure that operating costs are optimal while ensuring a safe working environment
Business processes need to know **where** something **is or has been** to derive value.

<table>
<thead>
<tr>
<th>Number of Facilities</th>
<th>Target Use cases</th>
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</thead>
<tbody>
<tr>
<td>Distribution centers</td>
<td>Asset and equipment location</td>
</tr>
<tr>
<td>500 – 1 Million Sq ft</td>
<td>Utilization rates for forklifts</td>
</tr>
<tr>
<td>4,500 – 250k – 1 M Sq ft</td>
<td>Safety – forklift accidents</td>
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<tr>
<td>40,000 – up to 250k Sq ft</td>
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<tr>
<td>Manufacturing</td>
<td></td>
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<td>346,000 manufacturers</td>
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- Initial target market includes Distribution and Manufacturing due to common requirements
- Later stage markets include Retail, Healthcare, Underground Mining, DoD and Public Safety
Solution comprises of low cost hardware paired with a cloud based analytics engine.
Easy deployment and integration with enterprise systems through cloud

Cloud based Data repository and analytics

Position Data

Pipeline

ERP/MRP/WMS/LMS

RestFUL API

Visualization

Actions

e.g. Stop Crane/Forklift
Navigate Autonomous Vehicle

ARIN Technologies
“Location as a Service” to enable many time saving and safety enhancing applications*

• Finding people, assets and other equipment
• Tracing a path for entities of interest
• Geo-fencing for one of more tracked entities
  • Warn appropriate authorities if a person is somewhere they should not be
  • Take action such as stop a gantry crane or stop a forklift if a person enters a prohibited area
  • Warn a construction worker when they get too close to a dangerous area

*In order of priority
Recurring revenue model with flexibility to support customers capital allocation goals

• Monthly fee based on type of service rendered
  • Find tagged entity
  • Insights/Reports based on historic data
  • Automated Actions through integration with business processes e.g. stop gantry crane or forklift if danger detected

• Hardware, Anchors and Tags can be distributed via
  • Lease hardware with usage commitment
  • Outright Purchase of hardware

• One time installation cost
  • Outsourced installation network
  • In-house installation team for specific type of customers
Finding traction in distribution centers and manufacturing plants

• Deployed at a e-commerce Fulfilment center
  • Daily pick path for order fillers
  • Time for each pick path
  • Distance travelled for each pick path
  • Inventory placement based on real time demand

• Fortune 200 company, pilot project
  • Forklift Safety
  • Spaghetti diagrams for lean operations
  • Utilization of forklifts
  • Many other use cases
We provide the highest value positioning in the indoor positioning ecosystem.
Extremely qualified team making this complex technology easily deployable

- **Aaron Acton, Technology:**
  - 12 yrs. of experience in complex scientific product development
  - ANSYS, Astrobotic
  - U of Ottawa – BS Eng., CMU – MS Eng. Robotics Institute

- **Perry Servedio, Product:**
  - 11 yrs. of experience in fail safe product development
  - ANSYS, CalISO
  - U Pitt - BS Eng.

- **Mark Imgrund, Operations:**
  - Retd. VP Product engineering from high growth technology company
  - ANSYS
  - Cornell – BS Eng., MS Eng., CMU MBA

- **Vivek Kulkarni, CEO:**
  - 16 yrs. of experience in Product development, Marketing and Strategy
  - ANSYS, PTC, ESI Group
  - U Bombay - BS Eng., U Cincinnati – MS Eng., CMU – M.B.A
Mentored by an extremely successful group of entrepreneurs and executives

- **Francois Estellon**
  - CIO, Gardner Denver
  - VP Product Management, Caterpillar
  - CIO, VP Technology, Bucyrus
  - VP Business Development and Delivery, Sycor
  - Founder/CEO, Business Connection

- **Joe Fairbanks**
  - Business advisor, Iagnosis
  - Retd. EVP Sales & Support, ANSYS

- **Stephan Mueller**
  - COO ThrillMill
  - COO, Just between Friends
  - CEO, Lily & Strum
  - Board Member, Coro Pittsburgh & RustBuilt
Supported by local organizations

• AlphaLabGear by InnovationWorks

• Startbot.io

• ThrillMill